

the description taken with the drawings making apparent to those skilled in

the art how the several forms of the invention may be embodied in

practice;

The patent or application contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

5 FIGs. 1a-f show simplified cross sections of several prior art

deformable mirrors: (a) piston activation of flat mirrors; (b) piston

activation of a continuous mirror; (c) a piezoelectric monolithic mirror; (d)

electrostatic membrane mirror; (e) bending moments using pistons

operable with either segmented mirrors or continuous mirrors; and (f) a

10 bimorph mirror.

FIG. 2 is a schematic depiction of an optical measurement system based on a curvature wave front sensor. A point source is collimated and reflected off a sample. A moving lens images two planes – the sample and one close to it – alternately on the camera. The off-sample plane exhibits intensity changes as a function on voltage on the sample. All these images are grabbed into the computer and processed to yield the voltage response of the surface of the mirror.

FIG. 3 shows dependence of the silicon-porous silicon bimorph mirror on voltage. One sees the reconstructed wave front reflected off the